



Telephone: (303) 861-4366  
Telecopier: (303) 832-3825  
Telex: 45-0033

June 5, 1984

**RECEIVED**

Mr. Ron Firth  
c/o Division of Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

**JUN 7 1984**

**DIVISION OF OIL  
GAS & MINING**

RE: Lighthouse 1-4

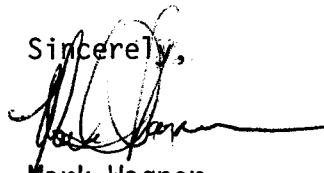
Gentlemen:

Please find attached for your approval the APD for the above referenced well.

Due to unsettled lease situations, Bow Valley may elect to drill in Section 10, or Section 4. We are permitting Section 4 for that reason.

Please direct any questions to me. Thanks for your cooperation.

Sincerely,



Mark Wagner  
Staff Engineer/Altamont Bluebell

Enclosure

MW/11m

THE STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL & GAS CONSERVATION

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL WELL ☐GAS WELL ☒

OTHER

SINGLE ZONE ☐MULTIPLE ZONE ☐

## 2. NAME OF OPERATOR

Bow Valley Petroleum Inc.

## 3. ADDRESS OF OPERATOR

1700 Broadway, #900; Denver, CO 80290

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1980FWL 1980FNL Sec.4-T16S-R16E

At proposed prod. zone

SAME

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

82 road miles SE from price, UT

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. line, if any)

1320'

## 16. NO. OF ACRES IN LEASE

2520.12

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL 640

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

4.25 mi.

## 19. PROPOSED DEPTH

12,500

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

9200' Ungraded G.L.

## 22. APPROX. DATE WORK WILL START\*

July 1, 1984

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13-3/8	54#	3000'	Cement to surface
12 1/4"	9-5/8	40#	9000'	1900 cu. ft (TOC 5000')
8-3/4"	7"	26-29#	12,500'	630 cu. ft.

To drill a 12,500' Morrison/Dakota gas test. Evaluation of oil potential will be done in the Mancos shale.

A rotating head will be used on all holes. Minimum 3000 psi BOPE will be nipped up and tested prior to drilling 8-3/4" hole. All BOPE will be operationally tested every 24 hours, and pressure tested to rated before drilling out any casing shoe or zones in which high pressure is expected. See attached BOPE diagram.

RECEIVED

JUN 7 1984

DIVISION OF OIL  
GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

TITLE Staff Engineer

DATE

6-4-84

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

OPERATOR Bow Valley Petroleum DATE 6-11-84

WELL NAME Lighthouse #1-4

SEC NESW 4 T 16S R 16E COUNTY Emery

43-015-30198  
API NUMBER

Lease  
TYPE OF LEASE

POSTING CHECK OFF:

<input type="checkbox"/>	INDEX	<input type="checkbox"/>	HL	<input type="checkbox"/>
<input type="checkbox"/>	NID	<input type="checkbox"/>	PI	<input type="checkbox"/>
<input type="checkbox"/>	MAP	<input type="checkbox"/>		<input type="checkbox"/>

PROCESSING COMMENTS:

Unit Well -  
Need water permit

APPROVAL LETTER:

SPACING: ☒ A-3 Trail Canyon Unit ☐ c-3-a CAUSE NO. & DATE  
☐ c-3-b ☐ c-3-c

SPECIAL LANGUAGE:

1 - Water



**Bow Valley Petroleum Inc.**

1700 Broadway, Suite 900, Denver, CO 80290

Telephone: (303) 861-4366  
Telecopier: (303) 832-3825  
Telex: 45-0033

**RECEIVED**

June 11, 1984

JUN 14 1984

Division of Oil, Gas & Mining  
4241 State Office Bldg.  
Salt Lake City, UT 84114

**DIVISION OF OIL  
GAS & MINING**

Attention: Arlene Bush

Re: Lighthouse #1-4  
Sec. 4-T16S-R16E  
Emery Co., UT

Gentlemen:

Please find attached an amended APD for the above referenced well.  
This APD supercedes all others.

Sincerely,

BOW VALLEY PETROLEUM INC.

Mark Wagner  
Staff Engineer/Altamont Bluebell

attachment

MW/bb

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS, AND MINING**

SUBMIT IN TRIPLICATE\*  
 (Other instructions on  
 reverse side)

5. Lease Designation and Serial No.

U28275

6. If Indian, Allottee or Tribe Name

N/A

7. Unit Agreement Name

Trail Canyon ✓

8. Farm or Lease Name

Lighthouse

9. Well No.

1-4

10. Field and Pool, or Wildcat

Beck Cliffs - Wildcat

11. Sec., T., R., M., or Blk.  
and Survey or Area

Sec. 4-16S-16E

12. County or Parrish 13. State

Emery

UT

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. Type of Well

Oil  
Well ☐Gas  
Well ☒

Other

Single  
Zone ☐Multiple  
Zone ☐

2. Name of Operator

Bow Valley Petroleum Inc.

3. Address of Operator

1700 Broadway, Suite 900, Denver, Co 80390

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface

1550 FWL; 1550 FSL Sec. 4-T16S-R16E SLB &amp; M

At proposed prod. zone

Same

14. Distance in miles and direction from nearest town or post office\*

26 road miles from Sunnyside UT

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. line, if any)

1550

16. No. of acres in lease

2520.12

17. No. of acres assigned  
to this well

640

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
or applied for, on this lease, ft.

5.00 mi.

19. Proposed depth

12,500

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

9270' Ungraded G.L.

22. Approx. date work will start\*

July 1, 1984

23.

**PROPOSED CASING AND CEMENTING PROGRAM**

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17½"	13-3/8	54#	3000'	Cement to surface
12½"	9-5/8	40#	9000'	1900 cu. ft (TOC 5000")
8-3/4	7"	26-29#	12,500'-8700'	630 cu. ft.

To drill a 12,500' Morrison/Dakota gas test. Evaluation of oil potential will be done in the Mancos shale.

A rotating head will be used on all holes. Minimum 3000 psi BOPE will be nipped up and tested prior to drilling 8-3/4" hole. All BOPE will be operationally tested every 24 hours, and pressure tested to rated before drilling out any casing shoe or zones in which high pressure is expected. See attached BOPE diagram.

**APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING**

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

**RECEIVED**

JUN 14 1984

**DIVISION OF OIL  
 GAS & MINING**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed \_\_\_\_\_

Title Staff Engineer

Date 6-4-84

(This space for Federal or State office use)

Permit No. \_\_\_\_\_

Approval Date \_\_\_\_\_

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

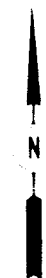
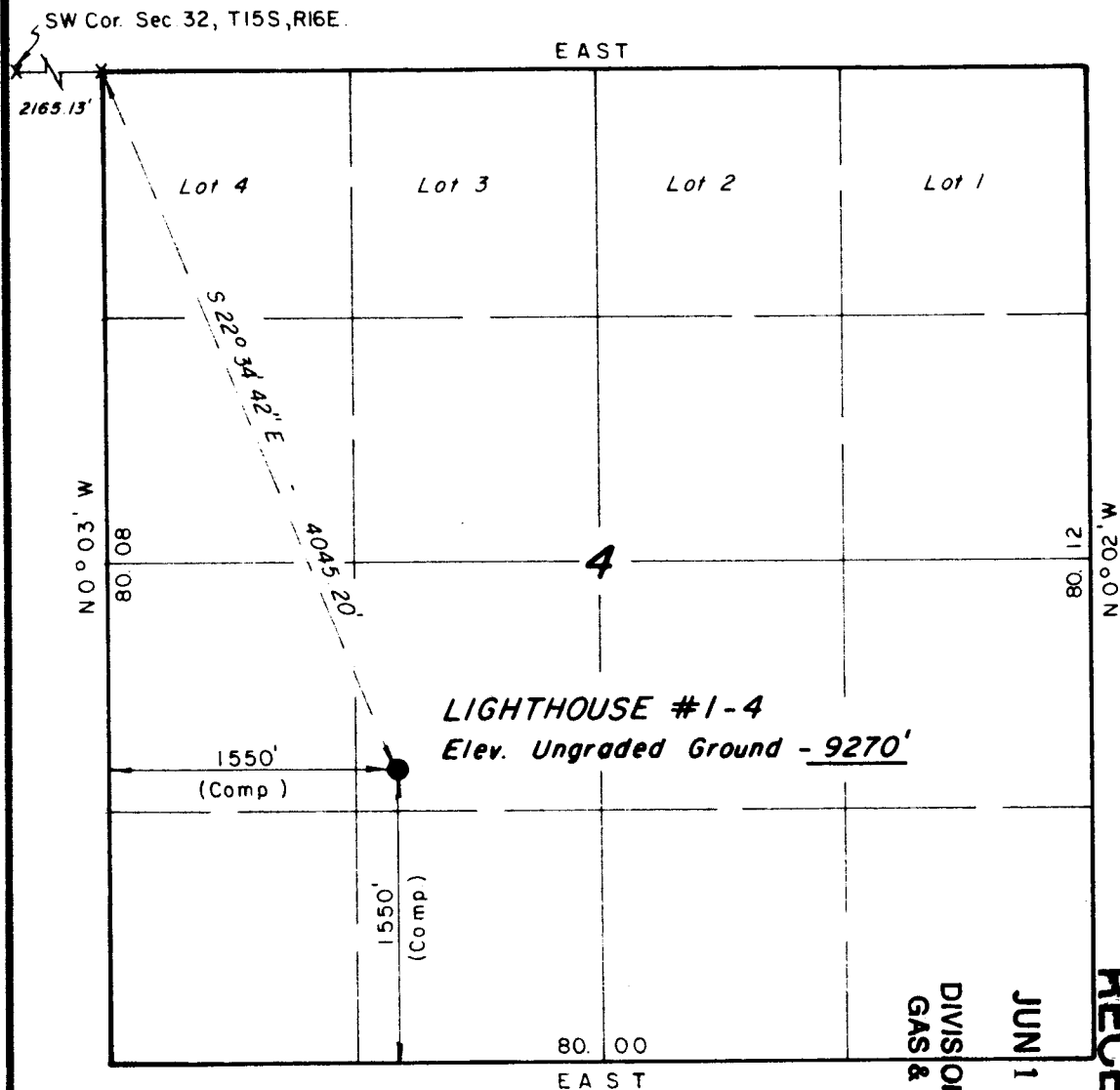
Conditions of approval, if any:

T16S, R16E, S.L.B. & M.

PROJECT

BOW VALLEY PETROLEUM

Well location, **LIGHTHOUSE**  
#1-4, located as shown in the  
NE 1/4 SW 1/4 Section 4, T16S,  
R16E, S.L.B. & M. Emery  
County, Utah.



WITNESSES

I, the undersigned, being a duly qualified and licensed Surveyor of the State of Utah, do hereby certify that the foregoing is a true and correct copy of the original survey as shown to me by the parties hereto, and that the same is a true and correct copy of the original survey as shown to me by the parties hereto, and that the same is a true and correct copy of the original survey as shown to me by the parties hereto.

*John J. Jernstedt*

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 2454  
STATE OF UTAH

RECEIVED

JUN 14 1984

DIVISION OF OIL  
& MINING

X = Section Corners Located

UINTAH ENGINEERING & LAND SURVEYING  
P O BOX Q - 85 SOUTH - 200 EAST  
VERNAL, UTAH - 84078

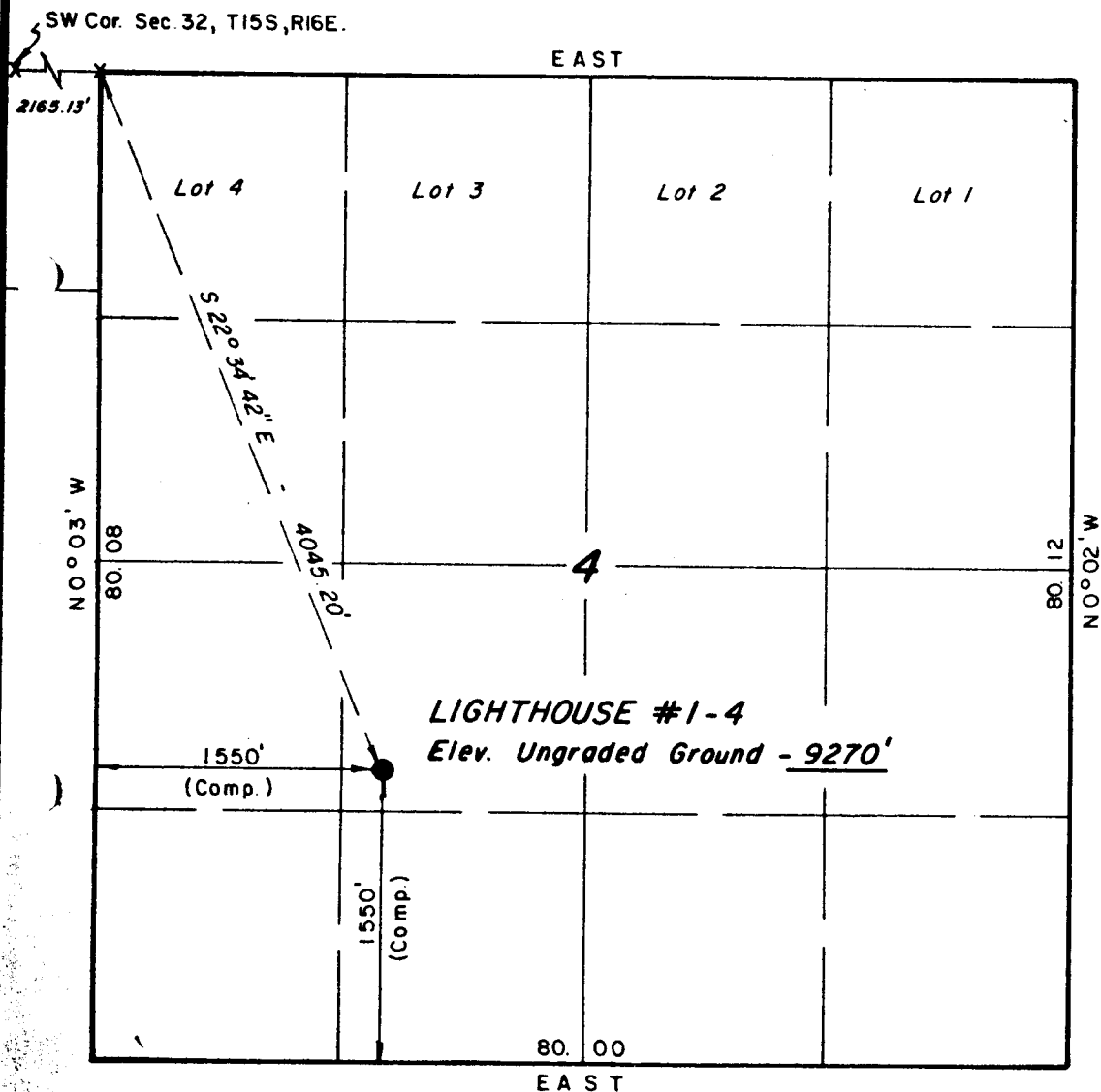
SCALE	1" = 1000'	DATE	6/6/84
PARTY	DB BL RP	REFERENCES	GLO Plat
WEATHER	FAIR	FILE	BOW VALLEY

*T16S, R16E, S.L.B. & M.*

PROJECT

BOW VALLEY PETROLEUM

Well location, *LIGHTHOUSE*  
# 1-4, located as shown in the  
NE 1/4 SW 1/4 Section 4, T16 S,  
R16 E, S.L.B. & M. Emery  
County, Utah.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAN WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO 2454  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
P. O. BOX Q - 85 SOUTH - 200 EAST  
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	6/6/84
PARTY	DB BL RP	REFERENCES	GLO Plat
WEATHER	FAIR	FILE	ROW 11

**X = Section Corners Located**

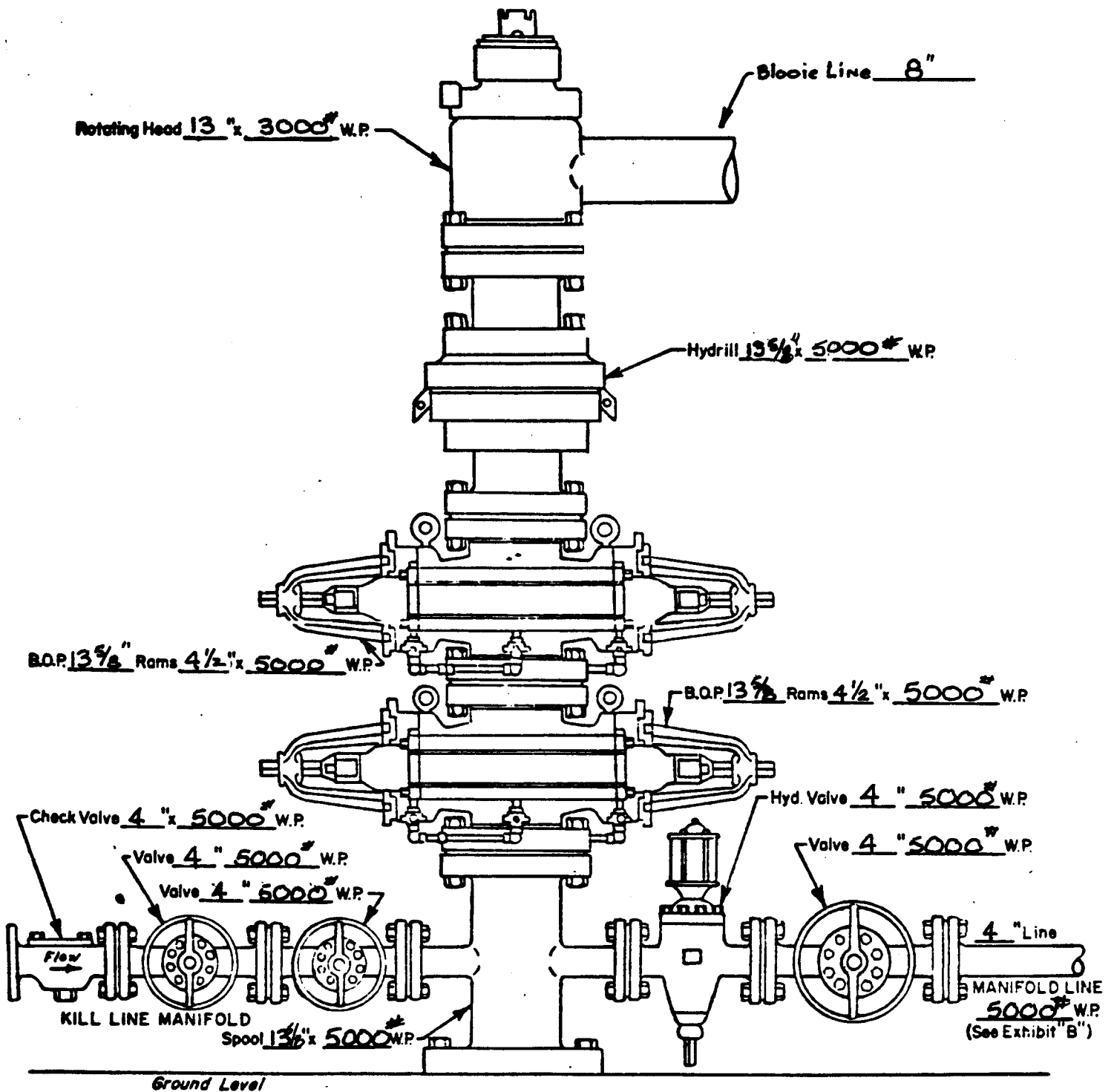
# BOW VALLEY PETROLEUM

## EXHIBIT A-\_\_

WELL NAME: LIGHTHOUSE 1-4

LOCATION: Sec. 4 T16S R16E

EMERY Co UTAH



WELL HEAD B.O.P.  
5000# W.P.

☐ Manual  
☒ Hydraulic

Will DRILL 12 1/4" / 8 3/4" HOLES  
THROUGH THIS EQUIP.



June 14, 1984

Bow Valley Petroleum Inc.  
1700 Broadway, Suite 900  
Denver, Colorado 80390

RE: Well No. Lighthouse #1-4  
NESE Sec. 4, T. 16S, R. 16E  
1550' FSL, 1550' FWL  
Emery County, Utah

Gentlemen:

Approval to drill the above referenced gas well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify R. J. Firth, Associate Director, Telephone (801) 533-5771 (Office), 571-6068 (Home).
4. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-015-30198.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

RJF/as  
cc: Branch of Fluid Minerals  
Enclosures

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different formation.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		JUN 25 1984		5. LEASE DESIGNATION AND SERIAL NO. U28275
2. NAME OF OPERATOR Bow Valley Petroleum, Inc.		DIVISION OF OIL GAS & MINING		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 1700 Broadway, Suite 900, Denver, Colorado 80290				7. UNIT AGREEMENT NAME Trail Canyon
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1550 FWL, 1550 FSL; Section 4, T16S, R16E SLB & M				8. FARM OR LEASE NAME Lighthouse
14. PERMIT NO.		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 9270' Ungraded G.		9. WELL NO. 1-4
				10. FIELD AND POOL, OR WILDCAT Book Cliffs-Wildcat
				11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4-16S-16E
				12. COUNTY OR PARISH Emery
				13. STATE Utah

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐PULL OR ALTER CASING ☐FRACTURE TREAT ☐MULTIPLE COMPLETE ☐SHOOT OR ACIDIZE ☐ABANDON\* ☐REPAIR WELL ☐CHANGE PLANS ☐(Other) ☐

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐REPAIRING WELL ☐FRACTURE TREATMENT ☐ALTERING CASING ☐SHOOTING OR ACIDIZING ☐ABANDONMENT\* ☐(Other) ☒

Spud

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Well was spudded w/Rathole rig. Conductor pipe will be set at 160'±.  
Spudded at noon on Sunday June 17, 1984.

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature]

TITLE Staff Engineer

DATE 6-21-84

(This space for Federal or State office use)

APPROVED BY [Signature]

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

REC'D MDO JUN 22 1984

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐JUL 12 1984 ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Bow Valley Petroleum Inc.

## 3. ADDRESS OF OPERATOR

1700 Broadway, Suite 900; Denver, CO 80290

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

At surface

1550 FWL, 1550 FSL; Sec. 4-T16S-R16E SLB &amp; M

At proposed prod. zone

same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

26 road miles from Sunnyside UT

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

1550

## 16. NO. OF ACRES IN LEASE

2520.12

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL

640

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

5.0 miles

## 19. PROPOSED DEPTH

12,500

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

9270' Ungraded G.

## 22. APPROX. DATE WORK WILL START\*

July 1, 1984

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13-3/8"	54#	3000'	Cmt to surf.
12 1/2"	9-5/8"	40#	9000'	1900 cu. ft. (TOC 5000")
8-3/4"	8"	26-29#	12,500-8,700'	630 cu. ft.

To drill a 12,500' Morrison/Dakota gas test. Evaluation of oil potential will be done in the Mancos shale.

A rotating head will be used on all holes. Minimum 3000 psi BOPE will be nipped up and tested prior to drilling 8-3/4" hole. All BOPE will be operationally tested every 24 hours, and pressure tested to rated before drilling out any casing shoe or zones in which high pressure is expected. See attache BOPE diagram.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

TITLE Staff Engineer

DATE 6-19-84

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

/s/ GENE NODINE

TITLE DISTRICT MANAGER

DATE 29 JUN 1984

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

SUBJECT TO RIGHT OF WAY  
APPROVAL

\*See Instructions On Reverse Side

FLARING OR VENTING OF  
GAS IS SUBJECT OF NTL 4-A  
DATED 1/1/80

*Private  
Water*

DIVISION OF OIL, GAS AND MINING

SPODDING INFORMATION

NAME OF COMPANY: BOW VALLEY PETROLEUM

WELL NAME: LIGHTHOUSE 1-4

SECTION NESW TOWNSHIP 16S RANGE 16E COUNTY Emery

DRILLING CONTRACTOR Apollo

RIG # 2

SPODDED: DATE 7-5-84

TIME 6:00 AM

How Rotary

DRILLING WILL COMMENCE \_\_\_\_\_

REPORTED BY Chuck Gardner

TELEPHONE # 722-5166

DATE 7-5-84 SIGNED AS

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

# SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U28275
2. NAME OF OPERATOR Bow Valley Petroleum, Inc.		6. IF INDIAN, ALLOTED OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR P.O. Drawer 130, Roosevelt, Utah 84066		7. UNIT ASSIGNMENT NAME Trail Canyon
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1550' FSL, 1550' FWL, NE SW		8. FARM OR LEASE NAME Lighthouse
14. PERMIT NO. 43-015-30198		9. WELL NO. 1-4
15. ELEVATIONS (Show whether DT, ST, OR, etc.) 9270' Ungraded ground		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., N., OR S.E., AND SURVEY OR AREA Sec. 4, T16S, R16E
		12. COUNTY OR PARISH Emery
		13. STATE Utah

## Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Spudding</u>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

This well was spudded on 7-5-84 @ 6:00 a.m. and reported to Ron Firth per telephone conversation with Charles C. Gardner at 4:10 p.m. on the same day.

Drilling contractor for this well is Apollo Drilling Company.

JUL 16 1984

DIVISION OF OIL  
GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED

*Michelle Emerson*

TITLE Eng. Tech.

DATE 7-13-84

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_



# Bow Valley Petroleum Inc.

P.O. Drawer 130, Roosevelt, Utah 84066

Telephone: (801) 722-5166

RECEIVED

July 13, 1984

JUL 17 1984

State of Utah  
Dept of Natural Resources  
Oil, Gas and Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

DIVISION OF OIL  
GAS & MINING

RE: Well No. Lighthouse 1-4  
NE SW Sec. 4, T16S, R16E  
1550' FSL, 1550' FWL  
Emery County, Utah  
API# 43-015-30198

Gentlemen:

Fresh water to drill this well is being purchased from Don Wilcox, a private party who resides in Green River, Utah.

The water is being pumped from his private pond located in SW 1/4 NE 1/4 Section 31, T15S, R16E, Emery County, Utah. Water source supplying the pond is Twin Springs creek.

If additional information is needed please call (801) 722-5166.

Very truly yours,

  
Michelle Einerson  
Engineering Technician

sf

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)OIL WELL ☒ GAS WELL ☐ OTHER ☐

NAME OF OPERATOR

BOW VALLEY PETROLEUM INC

ADDRESS OF OPERATOR

P.O. Drawer 130, Roosevelt, Utah 84066

LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

1550' FSL, 1550' FWL, NE SW

DIVISION OF OIL  
GAS & MINING

14. PERMIT NO.

43-015-30198

15. ELEVATIONS (Show whether dr., st., or etc.)

9270' Ungraded ground

6. LEASE DESIGNATION AND SERIAL NO.

U28275

7. IF INDIAN, ALLOTTED OR TRIBE NAME

N/A

8. UNIT AGREEMENT NAME

Trail Canyon

9. FARM OR LEASE NAME

Lighthouse

10. WELL NO.

#1-4

11. FIELD AND POOL, OR WILDCAT

12. SEC., T., R., M., OR BLK. AND  
SUBST. OR AREA

Sec. 4, T16S, R16E

13. COUNTY OR PARISH 14. STATE

Emery

Utah

RECEIVED

SEP 20 1984

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐  
☐  
☐  
☐  
☐

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

☐  
☐  
☐  
☐  
☐

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
☐  
☐  
☐  
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

Monthly drilling report X

(NOTE: Report results of multiple completion or well  
completion or recompletion report and log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

☐  
☐  
☐  
☐  
☐17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)  
DAILY DRILLING REPORTS LIGHTHOUSE #1-4  
Monthly Drilling report July-1984

DATE	DAY DRILLING	DEPTH	OPERATIONS
7-6-84	1	420'	Spud well & Drilling 17 1/2"
7-7-84	2	630'	Drilling 17 1/2" hole
7-8-84	3	1265'	"
7-9-84	4	1873'	"
7-10-84	5	2405'	"
7-11-84	6	3184'	"
7-12-84	7	3430'	Finish Drlg 17 1/2" hole & run 13 3/8" csg
7-13-84	8	3430'	Cementing 13 3/8" Casing
7-14-84	9	3430'	WOC
7-15-84	10	3430'	Drilling cement & float equipment
7-16-84	11	3856'	Drilling 12 1/4" hole
7-17-84	12	3914'	"
7-18-84	13	4436'	"
7-19-84	14	4906'	"
7-20-84	15	5283'	"
7-21-84	16	5408'	"
7-22-84	17	5412'	Drilling & work stuck pipe
7-23-84	18	5871'	Drilling 12 1/4" hole
7-24-84	19	5871'	Blow hole & trip for bit
7-25-84	20	5960'	Drilling 12 1/4" hole
7-26-84	21	6657'	"
7-27-84	22	6914'	"
7-28-84	23	6914'	Wash & ream to bottom
7-29-84	24	6914'	"
7-30-84	25	7153'	Drilling 12 1/4" hole
7-31-84	26	7201'	"

18. I hereby certify that the foregoing is true and correct

SIGNED

Michelle Emerson

TITLE Engineering Technician

DATE 9-18-84

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

# SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. ☐ OIL WELL ☒ GAS WELL ☐ OTHER

2. NAME OF OPERATOR  
BOW VALLEY PETROLEUM INC

3. ADDRESS OF OPERATOR  
P.O. Drawer 130, Roosevelt, Utah 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations.  
See also space 17 below.)  
At surface

1550' FSL, 1550' FWL, NE SW

14. PERMIT NO.  
43-015-30198

15. ELEVATIONS (Show whether of, to, or via.)  
9270' Ungraded ground

5. LEASE DESIGNATION AND SERIAL NO.

U28275

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

Trail Canyon

8. FARM OR LEASE NAME

Lighthouse

9. WELL NO.

#1-4

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 4, T16S, R16E

12. COUNTY OR PARISH

Emery

13. STATE

Utah

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

### NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐  
☐  
☐  
☐

PULL OR ALTER CASING

☐  
☐  
☐  
☐

MULTIPLE COMPLETION

ABANDON\*

CHANGE PLANS

REPAIR WELL

(Other)

### SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
☐  
☐  
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

☐  
☐  
☐  
☒

Monthly drilling report

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

### MONTHLY DRILLING REPORT - AUGUST 1984

DATE	DAY DRLG	DEPTH	OPERATION
8-1-84	27	7201'	Blowing hole & reaming bridges
8-2-84	28	7201'	Washing & reaming bridges
8-3-84	29	7201'	"
8-4-84	30	7201'	"
8-5-84	31	7201'	"
8-6-84	32	7229'	Drilling 12½" hole & reaming
8-7-84	33	7281'	"
8-8-84	34	7375'	Drilling 12½" hole
8-9-84	35	7446'	"
8-10-84	36	7552'	"
8-11-84	37	7692'	"
8-12-84	38	7798'	"
8-13-84	39	7898'	"
8-14-84	40	8017'	"
8-15-84	41	8145'	"
8-16-84	42	8182'	"
8-17-84	43	8272'	"
8-18-84	44	8360'	"
8-19-84	45	8460'	"
8-20-84	46	8532'	"
8-21-84	47	8603'	"
8-22-84	48	8603'	Logging
8-23-84	49	8603'	Running 9 5/8" Casing
8-24-84	50	8603'	Cementing 9 5/8" Casing
8-25-84	51	8603'	Drilling Cement
8-26-84	52	8603'	"
8-27-84	53	8603'	Cement squeeze DV Tool
8-28-84	54	8603'	Drilling Cement
8-29-84	55	8942'	Drilling 8½" hole
8-30-84	56	10545'	"
8-31-84	57	11953'	"

18. I hereby certify that the foregoing is true and correct

SIGNED

Michelle Finerson

TITLE Engineering Technician

DATE 10-2-84

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or to plug or to abandon wells or reservoirs.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		OCT 22 1984		5. LEASE DESIGNATION AND SERIAL NO. Fee
2. NAME OF OPERATOR BOW VALLEY PETROLEUM, INC. DIVISION OF OIL				6. IF INDIAN, ALLOTED OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR P.O. Drawer 130, Roosevelt, Utah 84066		GAS & MINING		7. UNIT AGREEMENT NAME Trail Canyon
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface		1550' FSL, 1550' FWL, NE SW		8. FARM OR LEASE NAME Lighthouse
16. PERMIT NO. 43-015-30198		18. ELEVATIONS (Show whether DF, RT, OR, etc.) 9270' Ungraded ground		9. WELL NO. #1-4
				10. FIELD AND POOL, OR WILDCAT
				11. SEC., T., R., M., OR BLK. AND SUBDIVISION OR AREA Sec. 4, T16S, R16E
				12. COUNTY OR PARISH Emery
				13. STATE Utah

18. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other)			

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)	Monthly drilling report		

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

MONTHLY DRILLING REPORT FOR SEPTEMBER 1984

Date	Day Drilling	Depth	Operation
9-1-84	58	12370'	Drilling 8-1/2" hole
9-2-84	59	12650'	"
9-3-84	60	12650'	Logging
9-4-84	61	12665'	Working stuck drill pipe
9-5-84	62	"	Free point and back off
9-6-84	63	"	Wash over top of fish
9-7-84	64	"	Attempt to screw on fish & POOH
9-8-84	65	"	Attempt to wash over fish
9-9-84	66	"	Wash over fish
9-10-84	67	"	TIH w/overshot-no success, made mechanical cut
9-11-84	68	"	Latched onto fish w/overshot, jarring
9-12-84	69	"	WO coiled tubing truck
9-13-84	70	"	WO coiled tubing truck
9-14-84	71	"	Wash w/coiled tubing 3/4"
9-15-84	72	"	TOOH w/5 Jts drill pipe
9-16-84	73	"	TIH w/screw-in sub
9-17-84	74	"	Cutting off drill pipe
9-18-84	75	"	WOC
9-19-84	76	"	Set 190 sx cement plug @8784'
9-20-84	77	8488'	Drilling cement
9-21-84	78	8679'	Drig cmt & TO for mud motor
9-22-84	79	8696'	Drilling 8-1/2" hole
9-23-84	80	8767'	"
9-24-84	81	8767'	Ream to bottom. SD f/high winds
9-25-84	82	9134'	Drilling 8-1/2" hole
9-26-84	83	9332'	"
9-27-84	84	9673'	"
9-28-84	85	10152'	"
9-29-84	86	10376'	"
9-30-84	87	10659'	"

18. I hereby certify that the foregoing is true and correct

SIGNED Michelle Emerson  
MICHELLE EMERSON

TITLE Eng. Tech.

DATE 10-19-84

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

NOV 13 1984

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO.  Fee 6. IF INDIAN, ALLOTTED OR TRIBE NAME  N/A
2. NAME OF OPERATOR  BOW VALLEY PETROLEUM, INC.		7. UNIT AGREEMENT NAME  Trail Canyon
3. ADDRESS OF OPERATOR  P.O. DRAWER 130, ROOSEVELT, UTAH. 84066		8. FARM OR LEASE NAME  Lighthouse
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface  1550' FSL, 1550' FWL, NE SW		9. WELL NO.  # 1-4
14. PERMIT NO.  API# 43-015-30198		10. FIELD AND POOL, OR WILDCAT   11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA  Sec. 4, T16S, R16E
15. ELEVATIONS (Show whether SP, RT, GR, etc.)  9270' Ungraded ground		12. COUNTY OR PARISH Emery
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CAGING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CAGING

SHOOTING OR ACIDIZING

ABANDONMENT\*

(Other) Monthly drilling report

(Note: Report results of multiple completion or well completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

MONTHLY DRILLING REPORT FOR OCTOBER 1984

DATE	DAY DRILLING	DEPTH	OPERATION
10-1-84	88	11,042	Drilling 8-3/4" hole
10-2-84	89	11,312	
10-3-84	90	"	Run surveys. TOOH.
10-4-84	91	"	Chng out BHA. TIE. Work tite hole
10-5-84	92	"	Unplugging bit & drill collar
10-6-84	93	9,980	Reaming
10-7-84	94	10,164	"
10-8-84	95	10,711	"
10-9-84	96	10,646	Reaming & unplugging bit
10-10-84	97	10,070	Reaming
10-11-84	98	10,712	"
10-12-84	99	11,111	"
10-13-84	100	11,312	"
10-14-84	101	11,321	Drilling 8 1/2" hole
10-15-84	102	11,446	"
10-16-84	103	11,593	"
10-17-84	104	11,720	"
10-18-84	105	11,866	"
10-19-84	106	12,043	"
10-20-84	107	12,063	"
10-21-84	108	12,092	"
10-22-84	109	12,129	"
10-23-84	110	12,224	"
10-24-84	111	12,260	"
10-25-84	112	12,340	"
10-26-84	113	12,445	"
10-27-84	114	12,466	"
10-28-84	115	12,590	"
10-29-84	116	12,663	"
10-30-84	117	12,692	"
10-31-84	118	12,702	TD hole. Run & cmt 5 1/2" liner.

18. I hereby certify that the foregoing is true and correct

SIGNED Michelle Emerson

TITLE Eng. Tech.

DATE 11-8-84

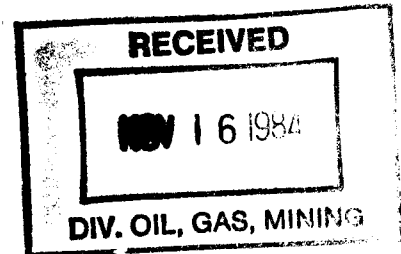
(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_ DATE \_\_\_\_\_



Telephone: (303) 861-4366  
Telecopier: (303) 832-3825  
Telex: 45-0033



Mr. E. W. Guynn  
Chief Area Manager  
Bureau of Land Management  
136 E. S. Temple  
Salt Lake City, Utah 84111

RE: LIGHTHOUSE #1-4 WELL  
EMERY COUNTY, UTAH  
TRAIL CANYON UNIT

Dear Mr. Guynn:

Bow Valley Petroleum Inc. has completed drilling and running production liner on the above referenced well at a depth of 12,704'. The wellbore penetrated apparent gas bearing horizons in the Dakota and Morrison Formations. Both of these zones will be completed and tested.

Due to weather and safety constraints, we will not attempt to complete the Lighthouse #1-4 well this year. The completion will be undertaken in early summer next year when weather and road conditions permit. Current conditions make it economically prohibitive to maintain the seventy (70) mile long road into this location. In addition, we do not believe it to be prudent to subject the men who would be working on this location to a potentially life threatening situation in the event of severe winter weather. Consequently, we will not complete this well this year.

Would you please be kind enough to review the Federal Unit Agreement and advise me if this plan of operation will satisfy the obligation well requirement by signing a copy of this letter and returning it to our Denver Office. In the event you find that this plan is in anyway unacceptable, please notify me at your earliest possible convenience.

Mr. E. W. Guynn

- 2 -

November 14, 1984

Thank you for your kind attention and cooperation. Looking forward to hearing from you shortly.

Yours very truly,

BOW VALLEY PETROLEUM INC.



David A. Gomendi  
Manager, Drilling & Production

DAG:jb

Note: Please note that this completion will not replace our plan of operations for 1985 which include the drilling and completion of a well in Section 10, Township 15 South, Range 16 East. The completion of the Lighthouse #1-4 will be in addition to the proposed plan that you already have.

RECEIVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1984.

By: \_\_\_\_\_  
\_\_\_\_\_

COMPLETION ATTEMPT OF THE LIGHTHOUSE #1-4 IN THE SUMMER OF 1985 WILL MEET UNIT OBLIGATIONS AND REQUIREMENTS.

cc: Bureau of Land Management  
P. O. Box 970  
Moab, Utah 84532

Attention: Mr. Gene Nodine  
District Manager

State of Utah  
Division of Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

Attention: Mr. Ronald Firth  
Chief Petroleum Engineer

cc: S. R. Gray  
B. A. Monson  
L. Bridges  
D. Johanningmeier  
D. Givens  
G. Carson



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

May 2, 1985

Bow Valley Petroleum, Inc.  
PO Drawer 130  
Roosevelt, Utah 84066

Gentlemen:

Re: Well No. Lighthouse 1-4 - Sec. 4, T. 16S., R. 16E.,  
Emery County, Utah - API #43-015-30198

The above referenced well has been under an operation suspended status for six months or longer. Please inform this office of the current status of this well location or what operations are currently being performed on this well.

Enclosed is Form OGC-1b, "Sundry Notices and Reports on Wells", that you may use to inform our office regarding this matter.

Sincerely,

Pam Kenna  
Well Records Specialist

Enclosure

cc: Dianne R. Nielson  
Ronald J. Firth  
John R. Baza  
File

0170S/51

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

# SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-28275
2. NAME OF OPERATOR Bow Valley Petroleum, Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR P.O. Drawer 130, Roosevelt, Utah 84066		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  1550' FSL, 1550' FWL, NE SW		8. FARM OR LEASE NAME Lighthouse
14. PERMIT NO. 43-015-30198		9. WELL NO. # 1-4
15. ELEVATIONS (Show whether of, to, or, etc.) 9270' Ungraded ground		10. FIELD AND POOL, OR WILDCAT Bookcliffs - Wildcat
		11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA Sec.4, T16S, R16E
		12. COUNTY OR PARISH 13. STATE Emery Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	Well Status <input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) \*

Operations have been suspended until early summer due to winter road conditions. Bow Valley Intends to complete the well this summer.

RECEIVED

MAY 13 1985

DIVISION OF OIL  
GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED

*Michelle M. Mechem*  
MICHELLE M. MECHAM

TITLE Eng. Technician

DATE 5-8-85

(This space for Federal or State office use)

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE  
(Other instructions on reverse side)

Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED

AUG 22 1985

1. ☐ OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR  
Bow Valley Petroleum, Inc.

3. ADDRESS OF OPERATOR  
P.O. Drawer 130, Roosevelt, Utah 84068

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
1550 FSL, 1550' FWL, NE SW Section 4

16. PERMIT NO.  
43-015-30198

18. ELEVATIONS (Show whether BV, ST, CR, etc.)  
9270' Ungraded ground

5. LEASE DESIGNATION AND SERIAL NO.  
U-28275

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A

7. UNIT AGREEMENT NAME  
Trail Canyon

8. FARM OR LEASE NAME  
Lighthouse

9. WELL NO.  
1-4

10. FIELD AND POOL, OR WILDCAT  
Bookcliffs-Wildcat

11. SEC., T., R., N., OR BLK. AND SURVEY OR AREA  
Sec. 4, T16S, R16E

12. COUNTY OR PARISH  
Emery

13. STATE  
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	FRACTURE TREATMENT	<input checked="" type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input checked="" type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other)	<input type="checkbox"/>	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Attached find a report of work performed on the well including a wellbore diagram showing a casing record and existing open perfs.

Well is currently shut in for pressure buildup.

18. I hereby certify that the foregoing is true and correct

SIGNED Michelle M. Necham TITLE Eng. Technician

DATE 8/20/85

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_ DATE \_\_\_\_\_

\*See Instructions on Reverse Side



RECEIVED

AUG 22 1985

DIVISION OF OIL  
& MINING

LIGHTHOUSE 1-4

OUTLINE OF WORK PERFORMED

1. Spot cement across liner lap.
2. Perf Morrison Form: 4" power-pac hollow carrier casing gun w/32 gram charges  
4JSPF      12572      12578  
12564      12573      12' 48 shots  
12568      12574  
12569      12575  
12570      12576  
12571      12577
3. Perf Buckhorn Form: 12511      12532  
12517      12533  
12523      12534  
12527      12535  
12530      12536      12' 48 shots  
12531      12537
4. Frac Morrison: 12564 - 12578 & Buckhorn 12511 - 12537  
w/49730 gal. Versa-gel 1500-HT and 18,300 # 20-40 mesh interprop
5. Re-Frac Morrison & Buckhorn perfs w/  
4000 gal 2% KCL w/base fluid containing additives  
40000 gal Versa-gel 1500 HT pad  
12000 gal versa-gel 1400 HT w/additives & 24,000 # 20-40 mesh sand
6. Perf Cedar Mountain Form: w/guns as above 12310' - 12327' (17 ft, 68 holes)
7. Frac Cedar Mountain Form: w/ 1000 gal 15% HCL w/additives & ball sealers followed by  
1000 gal Methanol  
Flush w/ 1450 gal 2% KCL H<sub>2</sub>O  
Surge balls off & pump 2000 gal Versa-gel 1500 HT pad  
in 5 stages w/ 1PPG 100 mesh sand on 2nd & 4th stages  
Pump 8000 gal Versa-gel 1400 HT w/1 PPG 20-40 sand  
Start 2PPG stage w/17000 gal Versa-gel 1400 HT w/ additives
8. Swabbing well.
9. Perf Dakota Form: w/4" power-pac hollow carrier casing guns w/4 JSPF, 32 Gram charges  
phased 90° 12109' - 12135' (excluding 12117')
10. Frac Dakota: Breakdown w/1000 gal 15% HCL w 150 ball sealers  
follow by 4000 gal pre-pad  
flush w/1500 gal 2% KCL H<sub>2</sub>O - Surge balls off  
Pump 37500 gal Versa-gel 1500 HT pad containing 5% diesel in 7 stages  
w/ 20-40 sand



Lighthouse 1-4  
OUTLINE OF WORK PERFORMED - continued

10. cont.

Pump 37500 gal Versa-gel 1400 HT Pad containing 5% diesel in 5 stages  
w/20-40 sand and last  
stage w/ carbo-prop

INITIAL PRESSURE TEST DATA W/ ALL PERFS OPEN & AFTER FRAC:  
(Dakota, Cedar Mountain, Buckhorn, Morrison)

8-14-85 8:00 a.m. w/ 1" orifice, 16/64 choke

Beginning mcf 161

Ending mcf 115

Average mcf during this 24 hour test 106.3

8-15-85 8:00 a.m. w/ 1" orifice, 12/64 choke

Beginning mcf 121

Ending mcf 132

Average mcf during this 18 hour test 85.6

# Lighthouse 1-4

## Surface Hole:

17 1/2" drilled to 3430'  
Set 13 3/8", 61#, K-55, STC  
csg w/ shoe @ 3331'  
Cemented w/ 670 SX Class  
"A", 900 SX Class "A" + N<sub>2</sub>  
(Cement to surface)

3331'

## Intermediate Hole:

12 1/4" drilled to 8603'  
Set 9 3/8", 43.5#, P-110, O-2663'  
9 3/8", 43.5#, N-80, 2663'-6081'  
9 3/8", 43.5#, S-95, 6081'-8366'  
Setting depth shoe @ 8603'  
Cemented 2 stages w/ 400 SX  
Class "H" + air and 730 SX  
Class "H"

8369'

8603'

Squeezed liner lap w/ 100 SX Class "H" cmt

## Production Hole:

8 3/4" drilled to 12,704'  
Set 5 1/2", 23#, L-80, LTC csg w/  
1 3/8" 5 1/2", 20#, L-80, LTC on top  
Setting depth shoe @ 12,704'  
Top of liner @ 8369'  
Liner type: BOT hyd set w/ 4"  
ID tie back  
Landing collar @ 12,665'  
Cemented w/ 1150 SX Class "H"

12704'

≡ Perf Dakota 12109' - 12135' w/ 4" Per-pac hollow  
carrier guns, 32 gram charges, 4 JSPP  
phased 90°

≡ Perf Cedar Mt. Form. w/ 4" Per-pac Hollow carrier guns  
32 gram charges, 4 JSPP  
12,310 - 12,327' (17 ft, 68 holes)

≡ Perf Buckhorn Form. w/ guns same as above  
12,511 - 12,537' (12 ft, 48 shots)

≡ Perf Morrison Form. w/ guns same as above  
12,564' - 12,577' (12 ft, 48 shots)

9/13/85  
JRB

Bow Valley - lighthouse 1-4 (Fed)  
Sec. 4, T16S, R16E, Emery Co.

Csg:  $13\frac{3}{8}$ " @ 3331 cmt. to surf.

$9\frac{5}{8}$ " @ ~~3331~~ ~~3331~~ 8566 cmt. w/ 1100 SX

Drl. to 12704

$5\frac{1}{2}$ " liner 8369' - 12704  
cmt. w/ 1150 SX

Per fs. in Morrison  
@ 12564 - 12577

Buckhorn 12511 - 12537

C. M. 12310 - 12327

Dakota 12109 - 12135

Mammoth 11090 - 11140

Perfs out of zone  
10090 - 10140

Slide in hole @ 12259 - 12300

- 
- ① Set retainer 50' above top perf  
& squeeze 100 SX.
  - ② Come out of hole & set a plug  
every 2000'

③ Perf. @ esq. shoe  $\frac{1}{2}$  circ.  
Cmt.

④ 25 sx @ surface

⑤ Place 10-15 sx in annulus if  
void.

Verbal acceptance given to  
James Hooks 722-5166

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN WRIT  
(Other instructions  
verse side)

Form approved  
Budget Bureau No. 1004-0139  
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		6. NAME OF LEASE NAME Lighthouse
2. NAME OF OPERATOR Bow Valley Petroleum, Inc.		7. WELL NO. 1-4
3. ADDRESS OF OPERATOR P O Drawer 130, Roosevelt, Utah 84066		8. FIELD AND POOL, OR WILDCAT Bookcliffs-Wildcat
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1550 FLS, 1550' FWL, NE SW Section 4		9. SEC., T., R., M., OR B.L. AND SURVEY OR AREA Sec. 4, T16S, R16E
5. PERMIT NO. 43-015-30198	10. ELEVATIONS (Show whether SF, ST, OR, etc.) 9270' Ungraded ground	11. COUNTY OR PARISH Emery
		12. STATE Utah

RECEIVED

SEP 30 1985

DIVISION OF OIL  
GAS & MINING

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRAC TURE TREAT	<input type="checkbox"/>	FRAC TURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other)	<input type="checkbox"/>		
PERM OR ALTER CASING	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	ALTERING CASING	<input checked="" type="checkbox"/>
ABANDON*	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
CHANGE PLANE	<input type="checkbox"/>		

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and notes pertinent to this work.)

As verbally approved with Greg Noble (BLM) and John Baza (Utah OGM) 9/13/85  
Bow Valley plugged and abandoned well on 9/17/85 as follows:

A wellbore diagram is attached.  
There are no recompletion possibilities.  
No additional surface disturbance is required.

Restoration and reseeding will be  
completed as specified in Surface  
use and Development Plan.

1. Set cement retainer @ 10,040' and test tbg to 4000 # & csg to 2000#.
2. Circ hole w/ 2% KCL water.
3. Spotted 20 sx 50/50 poz w/ 2% gel and retarder, 1.26 yield, 14.15#, 10 sx below retainer and 10 sx above retainer (200' plug f/ 9940' to 10,140').
4. Test csg to 2000#.
5. Spotted 35 sx 50/50 poz w/ 2% gel, 1.26 yield 14.15#, 8369'-8269' (100' plug at liner lap).
6. Perfed 4 shots in 9 5/8" csg @ 3000'. Establish circ between csg and surface pipe and circulate surface csg w/ 200 bbls 2% KCL water.
7. Spotted 185 sx 50/50 poz w/ 2% gel and 2% CaCl<sub>2</sub>, 1.26 yield, 14.15# (300' plug inside and outside pipe 2800' to 3100').
8. Spotted 10 sx 50/50 poz w/ 2% gel and 2% CaCl<sub>2</sub>, 1.26 yield, 14.15# @ 40' of surface (26' plug).
9. Cut off wellhead 4' below ground level, install dry hole marker.
10. Clean and reclaim location.

18. I hereby certify that the foregoing is true and correct

SIGNED Michelle A. Neenan TITLE Eng. Technician DATE 9/24/85  
(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

\*See Instructions on Reverse Side

DATE: 10/3/85  
BY: John R. Baza

FORM OGC-8-X  
FILE IN QUADRUPLICATE

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING  
\*\*\*\*\*

Well Name and Number LIGHTHOUSE 1-4  
Operator BOW VALLEY PETROLEUM, INC.  
Address P.O. DRAWER 130, ROOSEVELT, UTAH 84066  
Contractor APOLLO DRILLING  
Address 1625 BROADWAY, SUITE 2030, DENVER, COLORADO 80202  
Location NE 1/4, SW 1/4, Sec. 4; T. 16 ~~XX~~ <sub>S</sub>; R. 16 ~~XX~~ <sub>W</sub>; EMERY County

Water Sands:

	<u>Depth:</u>	<u>Volume:</u>	<u>Quality:</u>
	From- To-	Flow Rate or Head -	Fresh or Salty -
1.	<u>NONE ENCOUNTERED</u>		
2.			
3.			
4.			
5.			

(Continue on Reverse Side if Necessary)

Formation Tops:

- NOTE: (a) Upon diminishing supply of forms, please inform this office.  
(b) Report on this form as provided for in Rule C-20, General Rules And Regulations and Rules of Practice and Procedure.  
(c) If a water quality analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

STANDARD FORM NO. 1070-107  
(Other instructions on reverse side)

INDEXED NUMBER NO. 1070-107

U = 28275

5. LEASE DESIGNATION AND SERIAL NO.

N/A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Trail Canyon

8. FARM OR LEASE NAME  
Lighthouse

9. WELL NO.  
1-4

10. FIELD AND POOL, OR WILDCAT  
Bookcliffs - wildcat

11. SEC., T., R., M., OR BLM. AND  
SURVEY OR AREA  
Sec. 4, T16S, R16E

12. COUNTY OR PARISH  
Emery

13. STATE  
Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED

NOV 13 1985

DIVISION OF OIL  
GAS & MINING

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Bow Valley Petroleum, Inc.

3. ADDRESS OF OPERATOR

P O Drawer 130, Roosevelt, Utah 84066

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)

At surface

1550' FSL, 1550' FWL, NE SW

14. PERMIT NO.  
43-015-30198

15. ELEVATIONS (Show whether BP, RT, CR, etc.)  
9270' ungraded ground

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

FULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Reclaiming operations on the location have been completed with the exception of  
Reseeding which is to be done in the Spring of 1986 due to present weather conditions on the mountain.

At that time, the soil will be reseeded as decided upon in the original Landowner Agreement.

18. I hereby certify that the foregoing is true and correct

SIGNED

*Michelle M. Meacham*  
Michelle M. Meacham

TITLE

Engineering Technician

DATE

11/12/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

Surface Hole:

17 1/2" drilled to 3430'  
Set 13 7/8", 61#, K-55, STC  
csg w/ shoe @ 3331'  
Cemented w/ 670 SX Class  
"A", 900 SX Class "A" + N<sub>2</sub>  
(Cement to surface)

3331'

Lighthouse 1-4

Section 4, T16S, R16E  
Emery County, Utah  
Fed. Lease # U-28275  
API # 43-015-30198

\* Wellbore Diagram  
prior to P&A on 9-17-85

Intermediate Hole:

12 1/4" drilled to 8603'  
Set 9 5/8", 43.5#, P-110, O-2663'  
9 5/8", 43.5#, N-80, 2663'-6081'  
9 5/8", 43.5#, S-95, 6081'-8566'  
Setting depth shoe @ 8603'  
Cemented 2 stages w/ 400 SX  
Class "H" + air and 730 SX  
Class "H" - DV collar @ 7607'

8369'  
(Linerlap 234')

8603'

Squeezed liner lap w/ 100 SX Class "H" cmt  
7-20-85

Production Hole:

8 3/4" drilled to 12,704'  
Set 5 1/2", 23#, L-80, LTC csg w/  
1 jt 5 1/2", 20#, L-80, LTC on top  
Setting depth shoe @ 12,704'  
Top of liner @ 8369'  
Liner type: BOT hyd set w/ 4"  
ID tie back  
Landing collar @ 12,665'  
Cemented w/ 1150 SX Class "H"

\* Fish - Top @ 12259' - Bottom @ 12302'  
Made 3 attempts to recover on  
9-5, 9-6, 9-7 1985

TD - Shoe @ 12704'

50' perfs

950'

50' perfs

969'

26' perfs

175'

17' perfs

184'

26' perfs

27'

13' perfs

Perf Mancos 10090' - 10140' w/ 4" guns,  
9-7-85 1 premium SPF

Perf Mancos 11090' - 11140' w/ 4" gun,  
9-9-85 1 premium SPF

Perf Dakota 12109' - 12135' w/ 4" Pwr-pac hollow  
8-10-85 carrier guns, 32 gram charges, 4 JSPP  
phased 90°

Perf Cedar Mtn Form. w/ 4" Pwr-pac Hollow carrier guns  
8-5-85 32 gram charges, 4 JSPP  
12,310 - 12,327' (17 ft, 68 holes)

Perf Buckhorn Form. w/ guns same as above  
7-25-85 12,511' - 12,537' (12 ft, 48 shots)

Perf Morrison Form. w/ guns same as above  
7-25-85 12,564' - 12,577' (12 ft, 48 shots)

TIH w/ 4 1/2" OD mill 7-23-85  
Mill to 12662'





STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

November 13, 1985

Bow Valley Petroleum, Inc.  
P.O. Drawer 130  
Roosevelt, Utah 84066

Gentlemen:

Re: Well No. Lighthouse 1-4 - Sec. 4, T. 16S., R. 16E.,  
Emery County, Utah - API #43-015-30198

This letter is to advise you that the "Well Completion or Recompletion Report and Log" for the above referenced well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, and forward it to this office as soon as possible, but not later than November 27, 1985.

Sincerely,

Pam Kenna  
Well Records Specialist

Enclosure

cc: Dianne R. Nielson  
Ronald J. Firth  
John R. Baza  
File

0170S/22

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS, AND MINING**

SUBMIT IN DUPLICATE\*  
 (See other instructions  
 on reverse side)

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____										5. LEASE DESIGNATION AND SERIAL NO. U-28275	
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____										6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
2. NAME OF OPERATOR Bow Valley Petroleum, Inc										7. UNIT AGREEMENT NAME Trail Canyon	
3. ADDRESS OF OPERATOR P O Drawer 130, Roosevelt, Utah 84066										8. FARM OR LEASE NAME Lighthouse	
4. LOCATION OF WELL (Report location clearly and in accordance with any State Requirements) At surface 1550' FWL, 1550' FSL, NE SW										9. WELL NO. 1-4	
At top prod. interval reported below same										10. FIELD AND POOL, OR WILDCAT Wildcat	
At total depth same										11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 4, T16S, R16E	
14. PERMIT NO. 43-015-30198					DATE ISSUED 6/14/84					12. COUNTY OR PARISH Emery	
										13. STATE Utah	
15. DATE SPURRED 7/06/84		16. DATE T.D. REACHED 10/31/84		17. DATE COMPL. (Ready to prod.) Plugged & Abandoned		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 9270' ung. ground		19. ELEV. CASINGHEAD /			
20. TOTAL DEPTH, MD & TVD 12704'		21. PLUG, BACK T.D., MD & TVD /		22. IF MULTIPLE COMPL., HOW MANY* /		23. INTERVALS DRILLED BY /		ROTARY TOOLS /		CABLE TOOLS /	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* No production, plugged and abandoned 9/17/1985										25. WAS DIRECTIONAL SURVEY MADE no	
26. TYPE ELECTRIC AND OTHER LOGS RUN CNL, FDC, DIL, Cyberlook, GR Spectroscopy, GR temperature long, CET, CBL										27. WAS WELL CORED no	
28. CASING RECORD (Report all strings set in well)											
CASING SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED	
13 3/8"		61#		3331'		17 1/2"		670 sx 'A', 900 sx 'A' + N2			
9 5/8"		43.5#		8603'		12 1/4"		400 sx 'H' w/air, /30, sx 'H'			
29. LINER RECORD											
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*		SCREEN (MD)			
5 1/2"		8369'		12704'		1150 sx 'H'					
31. PERFORATION RECORD (Interval, size and number) See attached						32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.					
						DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED			
						see attached					
33.* PRODUCTION											
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)						WELL STATUS (Producing or shut-in)			
None - P & A well on 9/17/85								Plugged & Abandoned			
DATE OF TEST		HOURS TESTED		CHOKE SIZE		PROD'N. FOR TEST PERIOD		OIL—BBL.		GAS—MCF.	
FLOW. TUBING PRESS.		CASING PRESSURE		CALCULATED 24-HOUR RATE		OIL—BBL.		GAS—MCF.		WATER—BBL.	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)										TEST WITNESSED BY	
35. LIST OF ATTACHMENTS Perforation and Stimulation detail											
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records											
SIGNED <u>Michelle Mechem</u>				TITLE <u>Engineering Technician</u>				DATE <u>11/18/85</u>			

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
				WASATCH	2903'		
				NORTH HORN	5773'		
				MANCOS	8316		
				DAKOTA SILT	11,889'		
				DAKOTA SAND	12,002'		
				CEDAR MTN	12,222'		
				BUCKHORN	12,392'		
				MORRISON	12,556'		

Lighthouse 1-4  
Perforation Detail

- (1) Morrison Formation  
7/25/85 Perf w/ 4" pwr-pac hollow carrier csg gun, phased 90°  
32 gram charges, 4 JSPF

12564	12573	
12568	12574	
12569	12575	
12570	12576	12 feet, 48 shots
12571	12577	
12572	12578	

- (2) Buckhorn Formation  
7/25/85 Perf w/ guns, charges, and shots as above

12511	12532	
12517	12533	
12523	12534	
12527	12535	12 feet, 48 shots
12530	12536	
12531	12537	

- (3) Cedar Mountain Formation  
8/05/85 Perf w/ guns, charges, shots as above

12310	12318	12327
12311	12319	
12312	12320	
12313	12321	17 feet, 68 shots
12314	12322	
12315	12323	
12316	12324	
12317	12325	
	12326	

- (4) Dakota Formation  
8/10/85 Perf w/ guns, charges, shots as above

12109	12123	
12110	12124	
12111	12125	
12112	12126	
12113	12127	
12114	12128	
12115	12129	26 feet, 104 shots
12116	12130	
12118	12131	
12119	12132	
12120	12133	
12121	12134	
12122	12135	

(5) Mancos Formation  
9/9/85 Perf w/ 4" Guns, 1 premium JSPF

11090	11101	11112	11122	11133
11091	11102	11113	11123	11134
11092	11103	11114	11124	11135
11093	11104	11115	11125	11136
11094	11105	11116	11126	11137
11095	11106	11117	11127	11138
11096	11107	11118	11128	11139
11097	11108	11119	11129	11140
11098	11109	11120	11130	
11099	11110	11121	11131	
11100	11111	11122	11132	

52 feet, 52 shots

Lighthouse 1-4  
Stimulation Detail

- (1) Morrison and Buckhorn Formations  
7-28-85 (a. Frac w/49730 gal Versa-gel 1500-HT and 18000#  
20-40 mesh sand
- 8-2-85 Re-frac as follows:  
(a. Breakdown w/4000 gal 2% KCl w/base fluid  
(b. Pump 40000 gal Versa-gel 1500-HT pad  
(c. Pump 12000 gal Versa-gel 1400-HT and 24000#  
20-40 mesh sand
- (2) Cedar Mountain Formation  
8-6-85 Frac as follows:  
(a. Breakdown w/1000 gal 15% HCl acid followed w/1000 gal  
Methanol  
(b. Flush w/1450 gal 2% KCl H<sub>2</sub>O  
(c. Surge balls off and pump 2000 gal Versa-gel 1500-HT pad in  
5 stages w/1 PPG 100 mesh sand on 2nd and 4th stages  
(d. Pump 8000 gal Versa-gel 1400-HT w/1 PPG 20-40 mesh sand  
(e. Start 2 PPG sand stage w/17000 gal Versa-gel 1400-HT
- (3) Dakota Formation  
8-11-85 Frac as follows:  
(a. Breakdown w/1000 gal 15% HCl acid w/150 ball sealers  
(b. Flush w/1500 gal 2% KCl H<sub>2</sub>O  
(c. Surge balls off and pump 37500 gal Versa-gel 1500-HT pad  
containing 5% diesel in 5 stages w/20-40 mesh sand  
(d. Pump 37500 gal Versa-gel 1400-HT pad containing 5% diesel  
in 5 stages w/20-40 mesh sand and last stage w/carbo-prop
- (4) Mancos Formation  
9-10-85 (a. Frac w/5000 gal 15% HCl acid and 800 scf/bbl N<sub>2</sub>  
(b. Flush to bottom perf w/1920 gal 2% KCl H<sub>2</sub>O



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

February 27, 1986

Bow Valley Petroleum, Inc.  
P O Drawer 130  
Roosevelt, Utah 84066

Gentlemen:

Re: Lighthouse 1-4 - Sec. 4, T. 16S, R. 16E  
Emery County, Utah - API 43-015-30198

A review of our records indicates that copies of the electric and other logs, which were run on the referenced well, as indicated on the Well Completion Report dated November 18, 1985, have not been received. Rule 312, Oil and Gas Conservation General Rules, requires that copies of well logs be submitted within 90 days of abandonment of any well.

Please provide the required logs at your earliest convenience, but not later than March 10, 1986.

Respectfully,

Norman C. Stout  
Administrative Assistant

ta

cc: Dianne R. Nielson  
Ronald J. Firth  
John R. Baza

**FILE**

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